



666 Eleventh Street, NW, Sixth Floor  
Washington, D. C. 20001  
202.783.0070 Fax 202.783.0534  
www.cciainet.org

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Edward J. Black  
President & CEO

October 26, 2000

Ms. Magalie Roman Salas  
Secretary  
Federal Communications Commission  
445 12th St., S.W.  
Washington, DC 20554

Re: Ultra-Wideband  
ET Docket 98-153

Dear Ms. Salas:

I am writing on behalf of the Computer & Communications Industry Association (CCIA) to express support for the Federal Communications Commission decision on May 10, 2000 to unanimously adopt a Notice of Proposed Rulemaking (NPRM), which we hope will lead to the deployment of Ultra Wideband (UWB) technology.

CCIA is an international association of technology, telecommunications, and Internet firms, representing a broad cross-section of the industry. Our members employ nearly a million workers and generate annual revenues in excess of \$300 billion. CCIA and its members are dedicated to fostering new developments within the technology and telecommunications industries and to this end I hope our comments are helpful to you in the decision making process. We work to promote open markets, open systems, open networks and full, fair and open competition.

Our member companies are excited about the possibilities of UWB technology. We are pleased to see the positive response to the NPRM by numerous public safety, law enforcement, and health organizations, as well as prominent corporations. UWB enables dramatic improvements in communications, radar and position-location-tracking systems. The potential impact of this technology is still incalculable. If the technology lives up to its promise, it will compare to the life-changing development of the automobile, an invention touching every home and workplace. UWB is truly a technology with remarkable potential. For example in its filing, General Electric states, "Technically, GE feels ultra-wideband radio merits include: Negligible interference with medical & industrial systems... Our businesses need the solutions the technology offers. We feel it best that the market determine the usefulness of the technology, which we see as a potential 'game changer' for our company, and the productivity of the nation."

However, while the promise is great, CCIA is concerned that unnecessarily burdensome regulatory restrictions will hinder new technologies like UWB from being brought to the marketplace. The regulatory process should not be used to keep new

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entrants out at the expense of incumbents or prevent new technologies from being deployed. Only in this manner can our members benefit from the innovations and advances offered by new technologies to allow technology to continue as the engine for the U.S. economic growth. We are pleased that thus far the FCC has recognized the enormous potential for the public to benefit from UWB technology, and it is our hope that the FCC keeps its eye on the future as new technologies are brought to life.

The spectrum efficiency of UWB technology is unsurpassed. Chairman Kennard has repeatedly spoken about the "spectrum drought" and how UWB offers a solution to this pressing problem. UWB would create additional spectrum by allowing services that previously required valuable licensed spectrum to operate at ultra-low power using unlicensed spectrum. UWB could very well eliminate the spectrum shortage problem.

Computer and technology companies have been searching for ways to network their products using high data rates, high channelization, and very low power without the traditional multipath problems prevalent in wireless communications. UWB technology accomplishes these goals and can save lives while bringing new and cost-effective telecommunications services to consumers. As Siemens Corporation states, they "believe that due to the extremely low power and the extremely wide range in which UWB systems operate, the above mentioned functionality can be deployed without any detrimental effect to the other users of these frequencies." CCIA agrees.

It is our hope that the FCC will also recognize the important public safety benefits that UWB technology can provide. For example, UWB radar applications allow police officers and firefighters to track fugitives and victims behind walls, and enables rescue workers to find disaster victims buried under rubble. UWB position-location-tracking applications will allow firefighters to track the movements of their fellow firefighters in burning buildings, and to better coordinate personnel and equipment for on-scene emergency response. Rescue personnel and doctors could save lives and relieve suffering as they wirelessly communicate vast amounts of health information immediately from the scene of an accident to an emergency vehicle close by using Web-enabled, devices unencumbered by wire connection and without today's capacity limits or time lags. UWB radar can also enhance aviation safety by preventing runway incursions and improving airport and airplane security.

Furthermore, we are concerned that the U.S. could be left behind our international competition if UWB cannot be deployed expeditiously. CCIA members hope that UWB deployment will first occur in the nation that developed this remarkable technology – the United States. The U.S. may be at the forefront when it comes to Internet technologies and personal computers markets, but we face a "wireless gap" compared to Europe and Asia – by some estimates these regions are two years ahead of the U.S. in key areas of wireless technologies. Other countries are embracing UWB as a solution to their spectrum and performance problems and these countries will move quickly to deploy the technology. United States regulatory authorities cannot afford to allow U.S. companies to lose ground on cutting-edge technologies like UWB.

Because of the multitude of benefits that UWB technology can provide, CCIA urges the FCC to move forward promptly in making a decision regarding UWB technology, while adopting reasonable regulations to ensure the protection of critical public safety communications systems.

Sincerely,

A handwritten signature in black ink, appearing to read "Ed Black", with a large, sweeping flourish at the end.

Ed Black  
President & CEO  
Computer & Communications Industry Association